AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method for enhancing the solubility of paclitaxel using a highly uniform nano-scale paclitaxel solid dispersion prepared by a supercritical fluid process which comprises:

1) preparing a mixture of paclitaxel and a pharmaceutically acceptable additive and dissolving the mixture in a mixed organic solvent to obtain a solution mixture;

2) spraying the solution mixture of Step 1) to a supercritical fluid to form ~~recrystallized~~ crystallized particles of the mixture of paclitaxel and the pharmaceutically acceptable additive, the ~~recrystallized~~ crystallized particles containing paclitaxel of an altered crystallinity;

3) removing the organic solvent by washing the crystallized particles with a fresh batch of the supercritical fluid; and

4) recovering the crystallized particles prepared thereby.

2. (original): The method of claim 1, wherein the additive is a hydrophilic polymer or a surfactant.

3. (previously presented): The method of claim 2, wherein the hydrophilic polymer is one or more selected from the group consisting of hydroxypropylmethylcellulose (HPMC), polyvinylpyrrolidone, hydroxypropylcellulose (HPC), hydroxyethylcellulose (HEC), (meth)acrylate polymer, (meth)acrylic acid polymer, and a copolymer thereof.

4. (original) The method of claim 2, wherein the hydrophilic polymer is employed in an amount ranging from 0.1 to 20 weight part based on 1 weight part of paclitaxel.

5. (previously presented): The method of claim 2, wherein the amount of the hydrophilic polymer in the obtained solution mixture as a solvent-free basis is in the range of 1 to 75 %(w/w).

6. (previously presented): The method of claim 1, wherein the mixed organic solvent comprises a 1st organic solvent for dissolving paclitaxel and a 2nd organic solvent for dissolving the additive.

7. (original): The method of claim 6, wherein the two organic solvents are mixed in a weight ratio ranging from 7:3 to 5:5.

8. (original): The method of claim 6, wherein the organic solvent for dissolving paclitaxel is selected from the group consisting of dichloromethane, chloroform, carbon tetrachloride, ethylacetate, N,N-dimethylformamide, dimethylsulfoxide and tetrahydrofuran.

9. (original): The method of claim 6, wherein the organic solvent for dissolving the additive is selected from the group consisting of ethanol, methanol and isopropanol.

10. (currently amended): The method of claim 1, wherein the formation of ~~recrystallized~~ crystallized particles of the mixture containing paclitaxel and the additive is carried out under the condition of 35 to 70°C and 80 to 200 bar.

11. (withdrawn): A paclitaxel solid dispersion prepared by the method of claim 1.

12. (withdrawn): The paclitaxel solid dispersion of claim 11, which shows a thermochemical property determined by differential scanning calorimeter (DSC) different from that of a paclitaxel powder.

13. (withdrawn): A pharmaceutical composition of paclitaxel for oral and injection administration, which comprises the paclitaxel solid dispersion of claim 11 as an effective ingredient.